DOCUMENT RESUME

ED 255 681 CE 041 153

AUTHOR	Kjosnes, Iva S.
TITLE	Business and Office Curriculum Update. Final Report.
INSTITUTION	Zillah School District, WA.
SPONS AGENCY	Washington State Commission for Vocational Education, Olympia.
PUB DATE	28 Feb 85
NOTE	25p.; A Curriculum Development Project prepared at Zillah High School.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Accounting; Alphabetizing Skills; Bookkeeping; *Business Education; Business English; Business Skills; *Computer Literacy; Computer Oriented Programs; Curriculum Development; *Data Processing; Filing; High Schools; Learning Activities; Letters (Correspondence); *Office Machines; *Office Occupations Education; Recordkeeping; Secretaries; Technological Advancement; *Word Processing
IDENTIFIERS	Electronic Mail

ABSTRACT

A project was conducted to update an existing high school business and office occupations education curriculum to include instruction in the use of computers and word processing equipment. The existing curriculum was assessed and revised in order to provide students with training in the following areas: the impact of computers on employment; the usage of vocabulary associated with computers; the current applications and implications of computer technology in business; the use of software programs dealing with electronic spreadsheets, word processing, filing systems, taxes, accounting, and mailing lists in realistic business situations; the accurate and rapid input of information into a computer; and the use of computers in various office situations. The curriculum developed during the project incorporated commercially available software and teacher-developed learning activities into the following instructional units: keyboarding skills, preparing mailable letters, typing reports, organizing and filing records, maintaining financial records, computer programming, and developing business English skills. Student response to the updated curriculum has been quite favorable. (Appendixes to this report contain a 14-item annotated bibliography and sample instructional materials dealing with using a computer to assist in filing.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

WA84133 2P

ED255681

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BUSINESS AND OFFICE CURRICULUM UPDATE

FINAL REPORT
Project No. 84-ATL(189)NB

Curriculum Development Project
Conducted Under Public Law 94-482

Iva S. Kjosnes
Zillah School District
P.O. Box 777
Zillah, WA 98953

February 28, 1985

OE041153

Research Coordinating Unit
WASHINGTON STATE COMMISSION FOR VOCATIONAL EDUCATION
OLYMPIA, WASHINGTON 98504

FINAL REPORT

Project No. 84-ATL (189) NB

BUSINESS AND OFFICE CURRICULUM UPDATE

CURRICULUM DEVELOPMENT PROJECT
CONDUCTED UNDER
PUBLIC LAW 94-482

The project reported herein was performed pursuant to a grant from the Research Coordinating Unit of the Washington State Commission for Vocational Education. Contractors undertaking such projects under the Commission for Vocational Education sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Commission of Vocational Education position or policy.

IVA S. KJOSNES

ZILLAH HIGH SCHOOL
P.O. Box 777
Zillah, WA 98953

February 28, 1985

BUSINESS AND OFFICE CURRICULUM UPDATE

TABLE OF CONTENTS

PAGE

TITLE PAGE 1

TABLE OF CONTENTS 2

LIST OF ILLUSTRATIONS 2

SUMMARY OF REPORT 3

- Major activities 4
- Summary of Activities 5
- Summary of Results, Accomplishments 5
- Major Conclusions and Recommendations 5

BODY OF REPORT 6

- Statement of Problem 6
- Goals of Business Education Department 7
- Business Education Curriculum 8
- Outline of Computer Use in Business Education 9

RESULTS AND ACCOMPLISHMENTS 13

PROJECT EVALUATION 14

CONCLUSIONS 15

APPENDIX A 17

APPENDIX B 21

LIST OF TABLES AND ILLUSTRATRIONS

APPENDIX A - SELECTED BIBLIOGRAPHY 17

APPENDIX B - SAMPLE INSTRUACTIONAL MATERIALS 21

1. ALPHABETIC FILING 22
2. ALPHABETIZING 23

SUMMARY OF PROJECT

BUSINESS AND OFFICE CURRICULUM UPDATE

BRIEF DESCRIPTION OF PROJECT

The speed at which technology has advanced in the last decade in the business and office area is phenominal. Word processors and computers are replacing the traditional typewriters and calculators at a rapid pace in most business offices.

The purpose of this project is to integrate the use of the computer into all business subject areas in the business curriculum including bookeeping, recordKeeping, keyboarding, office procedures and simulation, data and word processing, and office machines in order to familarize students with the computer as an office tool and better prepare the student for the office of tomorrow.

While we have updated the equipment to meet business needs, we need to update the curriculum to provide better instruction utilizing computers. There is a lot of business software programs available but many lack the pedagogical soundness necessary for the classroom setting. Once the students have mastered the instructions included with the software they need further instructions for applying these skills to real-life business and office situations.

The ultimate goal of the project is to transfer learning experinces on computers to the reality of gainful employment in entry-level business and office jobs. The project will be evaluated by comparing student knowledge of using computers in business and office subjects after revising the curriculum with prior instruction.

MAJOR OBJECTIVES OF THE PROJECT

To revise the business and office curriculum at Zillah High School to integrate the use of computers in all subject areas and for all students enrolled in business classes in order that:

The student will become aware of the impact of computers on employment, of career options relating to computers, of the training requirements and will develop job placement skills.

The student will know and be able to use vocabulary associated with computers.

The student will know the current applications and implications of computer technology in business.

The student will be aware of the effects computer technology may have on people and society.

The student will be able to use software programs which deal with electronic spread sheets, word processing, filing systems, taxes, accounting, and mailing lists in realistic business situations.

The student will be able to solve problems relating to recordkeeping, bookkeeping, and math using the computer.

The student will be able to input information into the computer with speed and accuracy.

The student will be able to use the computer in various office procedures including filing, preparing mailing lists, alphabetizing, and to improve spelling and grammar.

SUMMARY OF ACTIVITIES

Following is a list of activities included in revising the curriculum of Zillah High School Business Department to included computer instruction in all subject areas.

1. Research of various books and magazines for ideas on revising the curriculum (See Appendic A).
2. Visitation of local businesses using computers.
3. Attended college classes on teaching writing skills and records management on the computer.
4. Attended conference on Computer instructions.
5. Prepared an outline of various topics which are taught in the Business Department and the various software which can be used to train the students.
6. Visited a small high school in Western Washington which uses computers in the Business Education Department.
7. Consulted with the head of the Business Education Department in Olympia for help in revising my curriculum.
8. Purchased software budgeted on the grant.
9. Prepared instruction sheets on software programs to assist students.

SUMMARY OF RESULTS; ACCOMPLISHMENTS

The time spent in research and preparation for classes has been very worthwhile as I implement the new curriculum. Most of the students prefer to use the computers particularly in accounting and typing. Not only does computer insturction prove to be a motivating force, it helps prepare them for our electronic society and the job market.

MAJOR CONCLUSIONS AND RECOMMENDATIONS

The amount of software and instruction material that has come on the market since I begin this project is phenomenal. I have reviewed much of this material and have impletmented some of it into the curriculum. Originally I felt the need to write more learning activity packets but this seemed unnecesary for some of the software since many of the publishers had recently done this.

I strongly recommend the use of computers in the Business Education Department of High Schools. While purchasing sophisticated word processing equipment is prohibited for most school districts, I feel that computers can serve many purposes such as word processing, bookkeeping, recordkeeping, teaching English skills, filling, and other office procedures.

STATEMENT OF PROBLEM

Economic forecasts indicated that by the mid-1990's, twenty-five percent of the gross national product will come from the sale of computer products. This means not only that there will be an increasing demand for people trained specifically in the use of computers but that most of our graduates will be using computers in their work even if only to a limited extent. With microcomptuers becoming more readily available and the forecast of a growing need for a computer literate society, business education teachers should be ready and willing to accept the challenge of preparing students for the information age.

A relevant secondary education curriculum is needed to reflect the rapidly changing computer technology and its corresponding impact on society. The responsiibility for offering a computer education program should be accepted by the school's business educators. Recent developments in microprocessor technology have changed the way business office workers view the world of computers. As business education teachers, we must keep in mind that we are teaching for the electronic office.

The goal of this project is to develop a business education curriculum consistent with emerging technology and developing occupations. The growth of word processing in government, business, and industry has mandated that education be provided specifically for word processing occupations.

One of the frustrations I have experienced as a business teacher is the lack of time during the regular school year to prepare assignments implementing the use of computers into the curriculum. This grant project enabled me to spend time during the summer months to work on revising the curriculum for all of my business classes, including Keyboarding, Accounting, Office Procedures, Recordkeeping, Computer/Data Processing and Word Processing. Presently we have sixteen Apple Computers in the Business Education Department. As a result of the project we have a business education curriculum which includes the use of computers in all business subjects.

In addition to reading extensively about implementing computers into the business education curriculum, I visited a small high school which uses computers extensively in the business education department, consulted with the head of Business and Office education in Olympia, and attended conferences and college classes on computer use in Business Education.

BUSINESS EDUCATION DEPARTMENT

ZILLAH HIGH SCHOOL

The Business Education Department at Zillah High School offers several vocational subjects. The goal of Business Education is to provide:

1. Specialized instruction to prepare students for careers in business including the use of computers in various business and office occupations.

2. Fundamental instruction to help students assume their economic roles as consumers, workers, and citizens.

3. Background information to assist students in preparing for professional careers requiring advanced study.

4. Technical skills and knowledge needed for entry or advances training in one or more of the following areas: general clerical, secretarial, and accounting/management occupations.

5. Successful jobsearch techniques.

Below is a list of subjects offered by our Business Department and the suggested sequence for enrollment. Included are both clerical-secretarial courses and business-accounting courses.

CLERICAL-SECRETARIAL

Keyboarding
Recordkeeping
Bookkeeping
Advanced Typing
Sec Office Procedures
Office Simulation
Word Processing
Comp/Data Processing
Business Communications

BUSINESS-ACCOUNTING

Keyboarding
Recordkeeping
Bookkeeping
Comp/Data Processing

BUSINESS EDUCATION CURRICULUM

COMPUTER RELATED ACTIVITIES

ZILLAH HIGH SCHOOL

In today's electronic office, it is important that level entry employees know and understand the potential of computers and word processing equipment. While the type of equipment will vary according to the individual office, word processing and other computer related activities will be necessary skills for each prospective employee.

The following outline lists several computer related office activities, the software we have which will accomplish these tasks, and the subject areas in which the training will take place. While there is some apparant over-lap, it is necessary to emphasize these tasks over and over again in order that students may be able to perform successfully in a career.

The software programs listed on the following pages are those presently available in the Business Department at Zillah High School including those purchased on the grant. Other programs will be added from time to time. The subjects listed are those presently taught at our school.

OUTLINE OF COMPUTER USE IN BUSINESS EDUCATION SUBJECTS

I. KEYBOARDING SKILLS (Speed and Accuracy)

A. Software
   1. Mastertype
   2. Typing Tutor
   3. Type Attack
   4. Bank Street Writer
   4. Apple Writer
   5. Keyboarding for Information Entry

B. Objectives
   1. Students will be able to demonstrate touch control on the alphabetic, numeric, and symbol keys.
   2. Students will be able to demonstrate the use of correct keyboarding techniques as posture, eyes on copy, hand position, correct stroking, and inserting and removing paper.
   3. The students will keyboard with acceptable speed and accuracy; proofread; make corrections; and properly format in usable form letters, envelopes, memos, manuscripts, and business forms.

C. Subject Areas
   1. Keyboarding (Beginning and Intermediate)
   2. Advanced Typing

II. PREPARING MAILABLE LETTERS

A. SOFTWARE
   1. Bank Street Writer
   2. Apple Writer
   3. Apple Works
   4. Writing Competency
   5. Mailing and Filing Systems
   5. The Sensible Speller

B. Objectives
   1. Students will be able to identify different types of letter styles.
   2. Students will identify and demonstrate the placement of various parts of a letter and envelope.
   3. Students will be able to type attractive, mailable letters and memorandums
   4. Students will be able to describe the role of word processing in business
   5. Students will be able to prepare mailing labels and print them out.

C. Subject Areas
   1. Data Entry (Keyboarding or Typing)
   2. Secretarial Office Procedures
   3. Word Processing
   4. Business Communications

III. TYPING REPORTS

A. Software
   1. Apple Writer
   2. Apple Works
   3. PFS File and Report
   4. Visicalc
   5. The Sensible Speller

B. Objectives
   1. The student will be able to assist in the preparation of business reports.
   2. The student will be able to explain the purpose of each part of a business report.
   3. The student will be able to type accurate financial statements and reports
   4. The student will be able to type legal papers accurately.

C. Subject Areas
   1. Advanced Typing
   2. Word Processing
   3. BookKeeping
   4. RecordKeeping
   5. Office Procedures

IV. ORGANIZING AND FILING RECORDS

A. Software
   1. PFS File and Report
   2. Filing and Mailing System
   3. Alphabetic Indexing Rules
   4. Alphabetize (PD)
   5. Apple Works

B. Objectives
   1. The student will be able to apply filing rules for indexing names of individuals and organizations.
   2. The student will be able to perform the steps in preparing, filing, and retrieving information.

C. Subject Areas
   1. RecordKeeping
   2. Secretarial Office Procedures
   3. Word Processing

V. FINANCIAL RECORDS

A. Software
1. Automated Accounting for the Microcomputer
2. The Home Accountant
3. Visicalc
4. MECC Business
5. Visicalc
6. Tax Manager
7. Accounting Programs (PD)
8. Microcomputer Activities for Recordkeeping
9. Sounds Abound (Accounting Simulation)

B. Objectives
1. The student will be able to prepare deposits and write checks.
2. The student will be able to explain and record on a computer the basic records for a payroll system
3. The student will be able to describe purchasing and receiving functions in modern businesses
4. The student will demonstrate skill in completing standard forms used in purchasing and receiving departments.
5. The student will demonstrate keeping of inventory on the computer
6. The student will be able to keep journal records, ledgers, and financial statements on the computer.
7. The student will be able to utilize the computer in preparing tax reports.

C. Subject Areas
1. Bookkeeping
2. Recordkeeping
3. Office Procedures
4. Data Procesisng

VI. PROGRAMMING -INTRODUCTION TO COMPUTERS

A. Software
1. Step by Step
2. LOGO
3. Computer Discovery
4. Apple Tutorial
5. MECC Programmers Aid and Applesoft Basic
6. System Master and Pro DOS

B. Objectives
1. To provide students with an understanding of the terminology used in the computer industry
2. To give students a basic foundation in some of the most frequently used computer programming languages, BASIC and LOGO
3. To educate students who wish to know how data are processed by computers
4. To educate students on basic computer procedures such as copying disks, programming, and graphics.

C. SUBJECT AREA - Computer Data/Processing I and II

VII. BUSINESS ENGLISH SKILLS

A. Software
   1. The Sensible Speller
   2. SAT
   3. Word Attack
   4. Spelling (Secretarial)
   5. English Related Exercises (Apple Writer)
   6. Spelling Rules

B. Objectives
   1. The students will be able to use correct English, grammar, puntuation, and spelling when preparing business letters and reports.
   2. The students will be able to improve their vocabulary and writing skills.

C. Subject Areas
   1. Business Communications
   2. Word Processing

RESULTS AND ACCOMPLISHMENTS OF THE PROJECT

BUSINESS AND OFFICE CURRICULUM UPDATE

Although I have had limited time to observe the results of this project in the classroom, I am confident that this will continue to strengthen the Business Education Department at Zillah High School. The research on business and office curriculums, the greater use of computers in all business subjects, and the preparation of assignments and learning activity sheets have proved valuable assets in the classroom.

Following is a list of some of the material I prepared to use in my classes:

1. Introduction of Bank Street Writer
2. Introduction of Apple Writer
3. Instruction sheet for Alphabetic Filing
4. Instruction sheets for Public Domain Programs
   a. Lemonade
   b. Selling Plants
   c. Alphabetizing
   d. Stock Market
5. Instruction sheet on Flowcharting
6. Computer simulation on use of compters in present and future
7. Lesson sheets on programming
8. Tests for various subject areas
9. Word Processing Assignments

Since I first started the project, several of the publishers have come out with workbooks to use with their software. I have purchased and used several of these including the following:

1. Home Accountant Workbook
2. Training disk for Visicalc
3. Student Lessons for MECC Business and programming software
4. Recordkeeping on the Microcomputer
5. Accounting Simulation - Sounds Abound
6. Microcomputer Activities for Office Procedures
7. Alphabetic Filing

BUSINESS AND OFFICE CURRICULUM UPDATE

PROJECT EVALUATION

The time spent in research has given me many ideas to strengthen my program at Zillah High School. I found several teaching ideas in the various magazines which I have use in my classes.

The Learning Activity instruction sheets, lesson assignments, and projects which have been used in the classroom have proved valuable both for group and individual use. While I have several periods in which students work in a lab setting, self-explanatory assignments are very helpful.

The ability of the students to understand and use business software has increased and improved over those in former classes.

The students have been asked orally to evaluate the instructions for using software. While some have difficulty, others need little or no help in understanding the instructions.

The students who use the computer in bookkeeping classes are eager to continue to use the computers for they find it easier and faster.

I find that students who start out using computers in beginning keyboarding turn in assignments with less errors than those who used typewriters. The ease of error correction helps them in accuracy.

Students in word processing and advanced typing classes frequently use the computer to prepare assignments for other classes.

A follow-up study will be made of students employed in business and office occupations as to the relevance of the curriculum. These findings will be used to improve and strengthen the present program.

BUSINESS AND OFFICE CURRICULUM UPDATE

CONCLUSIONS

Although it has been many years since I spent my childhood on a farm in the rolling hills of the Palouse country, I remember my disappointment when my father sold the horses and bought a tractor. The fact that he could do the work much faster and easier with a tractor did not concern me then. I loved horses and did not want him to sell them. Our country has changed rapidly from the horse and buggy days with little or no mechanization to a highly technical, computerized society. Progress and new innovations occur so frequently that it is impossible to keep up with today's technology. Office equipment which comes on the market today is already obsolete.

The entrance of computers into our educational system has caused fear, panic, distrust, confusion, and anger among teachers. Many educators, from the top down, do not want to become involved. The excuses are many. Teachers have all kinds of reasons why they do not want to become involved with computers. The following comments can be heard in the faculty room and at teacher conferences:

> The student teachers coming up can teach computers, not me.
>
> I don't know anything about computers, nor do I want to.
>
> Students will not learn if the computer does the work for them.
>
> The students know more about computer than I do and this disturbs me.
>
> I would like to learn more about computers, but I don't have time.
>
> The computer always comes up with something different than I put in.
>
> The computer wiped out my grades.
>
> One student is doing the work and the rest are making copies with the computer. (Something new????)

As a business education teacher I must prepare my students to suceed in an electronic age. Look at the businesses in your community, be they small or large, and see how many of them use computers in some form or other. It is predicted that 50 to 75% of all jobs will use computers in some way within the next few years, and this is already happening today.

We purchased our first computer at schcol with grant funds. With fear and uncertainty I made the decision to buy a computer instead of an electronic typewriter. To be at least be one jump ahead of the students, I enrolled in an introductory programming class. This was a disaster as I tried to learn programming in March and April when our computer did not arrive until May. I guess I enrolled under the false assumption that we would have hands on opportunity with a computer. All was not in vain though, for I could at least sit down and impress my students by putting in a simple program and making it work.

The one things that saved me from cracking under the strain of trying to learn how to use a computer and watching students learn faster than I had and going beyond what I knew, was the statement of a speaker at a Conference. He told us not to be disturbed when the students learned more on the computer than we knew. This is a characteristic of today's student growing up in an age of high technology and electronic learning. Now I am not afraid to ask my top students how to do a certain programming function.

What makes it all worthwhile is to see the excitement among the students as they work with computers in the classroom. Typing becomes far more exciting on a computer than on a typewriter. Term papers are easier to do and if a mistake is made, the students has only to make the necessary corrections and not retype the entire article. Bookkeeping is much easier when the computer posts to the ledger. Simulation and stradegy games encourage thinking and decision making.

Much of the chore of doing grades at the end of the quarter is removed as the computer sorts, lists, and calculates the grades providing a detailed list of every grade and point. Instead of being the last teacher to turn in grades, now I am among the first.

Tests, cross word puzzles, assignments, students reports, and grades are but a few of the daily chores of a teacher in which the computer can make life easier. The computer will even print out large letters to make signs for my bulletin boards, a job I have always disliked. Now I don't have to ask the art teacher to make letters for me. I am glad the electronic age has come to the classroom and I can use computers to help students learn to cope with the present and the future.

APPENDIX A

BUSINESS AND OFFICE CURRICULUM UPDATE

BIBLIOGRAPHY

OF SELECTED READINGS

BIBLIOGRAPHY

WITHOUT CARE, SCHOOLS WILL FOSTER A 'POWERFUL MISMATCH', by Richard Howard, Electronic Education, March-April, 1983 ---The development of quality programs... must become a national priority if we are to meet the demands of a high tech society and prevent ..'a powerful mismatch' between the needs of the business community and the skills of the students who graduate from our school systems.

THE OFFICE TECHNOLOGY CURRICULUM: EDUCATING THE WHOLE OFFICE WORKER. Business Education World, September, October, 1983.--- As technologies continue to merge, data processing and word processing are becoming part of a total integrated communications system. With recent changes in the office environment, the roles and responsibilites of office workers have expanded to accomodate the capabilities of automated office equipment. Now that word and data processing equipment is in use in many offices, every worker will be expected to be familiar with office technology. It is, therefore, critical that schools develop a curriculum that prepares students for the exciting, challenging, and important roles they will play in the electronic office.

CONCENTRATING ON CURRICULUM, Business Education Forum, February, 1983 amd March, 1983. --- These issues discuss ways in which subject matter should be revised to meet the needs of students, community, and job market in classes which include Secretarial Procedures, Communication, Typewriting, Information Processing, and Accounting.

'WHAT'S HOLDING UP THE SHOW?" IT'S NOT THE MICROS, BUT MATERIALS TO USE WITH THEM. TODAY'S EDUCATION, APRIL-MAY, 1982. --- There is an increading amount of software or courseware available. Often this software is the brain child of talented and creative programmers but lacks the pedagogical soundness necessary for the classroom setting. In other instances, the produces is that of teachers who have pedagogy and the subject matter content in hand but lack the technical skills necesary to use the computer to the best advantage.

MICROCOMPUTER APPLICATIONS IN BUSINESS EDUCATION PROGRAMS by Stocker and Neal, Business Education Forum, March 1983 --- Business education teachers at the secondary level will need assistance in establishing courses and integrating the computer into their business classes....As business continues to strive for increased productivity, technology is becoming all pervasive in the modern business office. Students must be taught to use technology, and in particular the microcomputer, to provide the decision makers the right information, at the right time, and in the right place.

UPDATING CONTENT IN SECONDARY BUSINESS EDUCATION, NBEA 1981 Yearbook. --- The yearbook focuses on trends affecting the secondary curriculum, impact of technology on communications in the office, and defines various methods for determining curriculum needs, and suggests ways of implementing these changes.

THE CHANGING OFFICE ENVIRONMENT, NBEA 1980 Yearbook --- This Yearbook discusses the important changes that are occurring in the office, how they will affect future office operations and employees behavior, and the curriculum implications for all levels of business programs.

CURRICULUM DEVELOPMENT IN EDUCATION FOR BUSINESS, NBEA 1977 Yearbook --- This Yearbook deals with the broad, vertical spectrum of business curriclum.

OFFICE OF THE FUTURE - STILL A PEOPLE PLACE by Bonita Stoufer, The Balance Sheet, September/October, 1983. --- Steps must be taken now to prepare business programs for the challenges of the electronic age.

ESTABLISHING QUALITY STANDARDS FOR COURSEWARE by Jonah P. Hymes, The Balance Sheet, September/October, 1983. --- Instructional software, most commonly referred to as 'courseware.' is now beginning to be marketed widely for use with personal computers. Teachers will need to know how to select and use quality software.

THE MICROCOMPUTER IN THE WRITING/READING/STUDY LAB by Robert Levin and Claire Doyle, T.H.E JOURNAL, February, 1983 --- The English Faculty at North Coountry Community College in Sarana Lake, New York has begun to take advantage of the microcomputer to support instruction in writing, reading, and study skills. As the students were introduced to microcomputer, word processing teachers begin to notice an improvement in the students' compositional qualities. Sentences became sharper. Spelling errors decreased. Even the organizational pattern of the essays became more controlled. Many students, however, were limited by their hunt-and-peck technique and an orientation-to-keyboard session is being considered for all students.

A large part of the success we have had with Computer Assisted Instruction in writing and reading instruction is due to the excitement that surrounds the technology. When we tell our composition classes that they will be learning to write on the computer, faces visibly brighten. There is a hum of excitement and anticpation. In large measure, the anticipation has been met by successful, tangible results. Specifically, many of our students are writing better, and reading more efficiently and effectively because of our applications of the micromputer.

TODAY'S EDUCATION, 1983-1984 Annual, National Education Associatio --- In listing ideas and trends for education now and in the future, the 1983-1984 annual of Today's Education includes the use of the computer in Writing and English - As more and better software becomes available, the computer will become a regular classroom teaching tool. Students will use it to prepare and rewrite drafts... The computer revolution figures to help, not hinder writing. Access to word processors at home and school is creating a new breed of student writer, one for whom revising is natural part of creating a written piece because it's so much easier to do technically.

BEYOND THE TYPEWRITER, by Robert J. Gula, CLASSROOM COMPUTER NEWS, May/June 1982. pp. 31,32. --- Robert J. Gula, an English teacher at Groton School, Groton, Massachusetts, looks at the word processor and finds it to be perhaps the most powerful tool encountered in the teaching of composition and is now at the stage where he would require every English student to learn to use the word processor. The standard of quality of the compositions is far greater, their thoughts are more fully develped, their prose is clearer, and there are far fewer technical errors. The student's attitude improves and with the improvement of that attitude is invariably and impovement in quality. While his study was with senior students, he feels equally strong that younger students can profit just as much from word processing. The earlier students learn to type, to compose at the typewriter, to edit scrupulously and to submit nothing but their best, the better off they will be. And the earlier they learn that writing can be relatively easy, not painfully agnonizing and loaded with frustration, the more to their advantage.

HOW COMPUTERS ARE CHANGING THE CLASSROOM, by Dan Kaercher, Better Homes and Gardens, April, 1983, pp. 17,19. --- Computer technology is leapfrogging from the worlds of commerce, science, and industry into America's classrooms. ..In high school English and foreign language classes, computer word processors enable students to correct mistakes on their written owrk, shift sentences or paragraphs, or discard entire passages within seconds. Individualization, immediate and personalized responses, motivation, and a safe learning environment for students are some of the advantages of computer learning.

APPENDIX B

BUSINESS AND OFFICE CURRICULUM UPDATE

SAMPLE OF SELECTED MATERIALS

PREPARED FOR CLASSROOM USE

ALPLHABETIC INDEXING RULES

APPLICATION BY COMPUTER

An efficient filing system is crucial to any business. To be found rapidly, important papers must be filed according to certain rules. As an office worker, you will be required to know the rules of the alphabetic filing method. The purpose of this unit is to learn the basic rules for alphabetic filing and apply these rules in indexing and alphabetizing personal and business names as they apply to the various business occupations.

LEARNING OBJECTIVES

1. Index and alphabetize personal names, names of businesses, organizations, and institutions including those with plural and/or possessives.

2. Index and alphabetize names which include courtesy and occupational titles, names with foreign articles and particles, identical names, and business names which contain numbers.

3. Index and alphabetize single words separated by hyphens or spaces, words with prefixes, compound personal, geographic, and business names.

4. Index, code, and alphabetize government names and unusual and obsecure names.

5. Cross reference nammes of married women, compound personal, geographic, and business names.

INSTRUCTIONS

ALPHABETIC INDEXING RULES is an instruction unit on basic alphabetical filing rules. Before you use the computer, you are to read the rules at the beginning of each session in the workbook. For examples, Session 1, read pages 1 - 9. After you have read the opening pages, do the exercises at the end of the session. Write you answers on the paper provided. Do not write in the workbook. As you finish each exercise, bring them to the teacher for correcting. Then take the disk ALPHABETIC INDEXING RULES APPLICATION BY COMPUTER. Go through Computer Session 1. After you have finished ask for Test 1.

Follow the above procedure for Session 2, 3, 4, and 5 in the workbook. Before you take the final test, go over the review on page 97.

Remember: Index ordering comes before alphabetic ordering. You must index before you can alphabetize. Indexing units are only those words, letters, or numbers in a name that are used to alphabetize the name.

ALPHABETIZING ASSIGNMENT

Among its many capabilities, the computer has the ability to alphabetize or sort names, providing you have a pre-written program to accomplish this task. Follow the instructions below and complete this assignment on alphabetizing as directed.

1. Get the disk with the ALPHABETIZE program from you teacher. Put it in the computer, turn the computer on. After the disk drive light goes off, type RUN ALPHABETIZE. The program will load into your computer.

2. Follow the directions on the screen.

3. Alphabetize the following lists. Remember - if you alphabetize names, put them in proper filing sequence; last name first, then first name and middle initial or name. REMEMBER ALPHABETIZING TAKES TIME so give the computer plenty of time, particularly with long lists of words or names. It may take several minutes.

4. Print a copy of each list and turn in to your teacher. If you have more than one sheet of paper, staple them together. BE SURE YOUR NAME is on each assignment you turn in.

5. Be sure the printer is turned on before you tell the computer to print you list.

ASSIGNMENTS

1. Put in the first names of all students in the room and alphabetize.
2. Put in the first and last names of fifteen friends and alphabetize.
3. Put in the names of your teachers and alphabetize.
4. Alphabetize the following words:

computer	character	xray
business	February	word
processing	awesome	control
experience	reset	government
profit	diskette	application
monitor	atmosphere	spacecraft
alphabet	zebra	screen
prepare	apple	industry
education	friend	receive
companies	miracle	presentation

5. Alplhabetize the following names of presidents of our country.

George Washington	Theodore Roosevelt
Abraham Lincoln	John F. Kennedy
Franklin D. Roosevelt	John Quincy Adams
Ronald Reagan	James Monroe
John Adams	Lyndon Johnson
Dwight Eisenhower	Thomas Jefferson
Grover Cleveland	Jimmy Carter
Andrew Johnson	